

defining a portion of a guidewire receiving lumen extending along at least a portion of the distal shaft  
5 section, and a distal tip member having a proximal end secured to a distal end of the inner tubular  
member to form a joint with the distal end of the inner tubular member, the distal tip member defining  
a distal portion of the guidewire receiving lumen in fluid communication with the portion of the  
guidewire receiving lumen defined by the inner tubular member and a port at the distal end of the shaft;

b) a balloon on the distal shaft section having a proximal shaft section bonded to  
10 the outer tubular member, a distal shaft section bonded to the inner tubular member, an inflatable  
section, and an interior in fluid communication with the inflation lumen; and

c) a flexible sleeve secured to the distal tip member and the inner tubular member,  
and disposed about the joint between the distal tip member and the inner tubular member, and having  
a proximal end located distal to the distal end of the balloon, and a distal end located proximal to a  
15 distal end of the distal tip member.

37. (New) The balloon catheter of claim 36 wherein the proximal end of the sleeve butts-up  
to the distal end of the balloon distal shaft section.

38. (New) The balloon catheter of claim 36 wherein the proximal end of the distal tip  
member forms a butt-joint with the distal end of the inner tubular member.

39. (New) The balloon catheter of claim 36 wherein the sleeve is formed of a polymeric  
material compatible with a polymeric material of the distal tip member and is fusion bonded thereto.